Patch Cord &Pigtails

Patch Cord & Pigtails

Description

YOFC provide complete varieties of optical fiber connector according to customer's requirements. From single core connector to high-density multi-fiber connector.YOFC all products in the insertion loss and return loss are reaching or higher than all the industrial standards.

Applications

Connection between or within frames， connection between frames and devices.

Characteristics

Standard simplex/duplex LC connector，customized SC/FC etc
Factory pre-termination, 100% tested to ensure the transmission performance
Rapid configuration, reduce installation time
Rapid upgrading, support parallel transmission
Loose tube structure, OFNR,OFNP and LSZH materials are available for outer sheath

Complied Standands

Comply with IEC 61754 series
Telcodia GR-326-CORE Issue 4 standards.
Fire resistance comply with low smoking (IEC 61304)
Halogen free (IEC 60754-1)
Flame retardant (IEC 60332-3C)
Corrosion proof (IEC 60754-2)

Connector Performance

Connector Type	IL(dB)	RL(dB)	500 times Durability ΔIL(dB)	Temperature Cycling ΔIL(dB)
LC/SC/FC/ST/E2000 MM	0.22(Typical) 0.30(Max)	≥36	≤0.20	≤0.20
LC/SC/FC/ST/E2000 SM	0.22(Typical) 0.30(Max)	PC≥40 UPC≥50 APC≥60	≤0.20	≤0.20

Environmental Performance

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Patch Cord &Pigtails

Fibre Count	Bending Radius(mm)		Temperature(℃)			Package
	Static	Dynamic	Operation	Installation	Storage	
1	10D	20D	-40~+75	-5~+50	-40~+80	PE bag
2	10D	20D	-40~+75	-5~+50	-40~+80	PE bag

Optical Performance

Fiber

ITU-T G.652D

Category	Items	Unit	Description	
			Before cabled	After cabled
Optical Characteristics	Attenuation at 1310 nm	dB/km	≤ 0.34	≤0.40
	Attenuation at 1383 nm	dB/km	≤ 0.34	≤0.40
	Attenuation at 1550 nm	dB/km	≤ 0.20	≤0.30
	Attenuation at 1625 nm	dB/km	≤ 0.23	≤0.30
	Zero dispersion wavelength	nm	1312 ± 12	
	Zero dispersion slope	ps/(nm^2·km)	≤ 0.092	
	Cable cut-off wavelength λcc	nm	≤ 1260	
	Mode field diameter (MFD) at 1310 nm	μm	8.7~9.5	
	Mode field diameter (MFD) at 1550 nm	μm	9.9~10.9	
	Group Index of Refraction（Typical）at 1310 nm	/	1.466	
	Group Index of Refraction（Typical）at 1550 nm	/	1.467	
	Macro-bend loss(1 turn, 16mm radius) at 1550nm	dB	≤ 0.05	
	Macro-bend loss(100 turn, 25mm radius) at 1310&1550nm	dB	≤ 0.05	
	Macro-bend loss(100turns, 30mm radius) at 1620nm	dB	≤ 0.05	
Geometrical Characteristics	Cladding diameter	μm	125 ± 0.7	
	Cladding non-circularity	%	≤ 1.0	
	Coating diameter	μm	245 ± 7	
	Coating/cladding concentricity error	μm	≤ 12.0	
	Coating non-circularity	%	≤ 6.0	
	Core/cladding concentricity error	μm	≤ 0.6	

ITU-T G.657A2

Category	Items	Unit	Description	
			Before cabled	After cabled
Optical Characteristics	Attenuation at 1310 nm	dB/km	≤ 0.35	≤0.40
	Attenuation at 1383 nm	dB/km	≤ 0.35	≤0.40
	Attenuation at 1550 nm	dB/km	≤ 0.21	≤0.30
	Attenuation at 1625 nm	dB/km	≤ 0.23	≤0.30
	Zero dispersion wavelength	nm	1300~1324	
	Zero dispersion slope	ps/(nm^2·km)	≤ 0.092	
	Cable cut-off wavelength λcc	nm	≤ 1260	
	Mode field diameter (MFD) at 1310 nm	μm	8.4~9.2	
	Mode field diameter (MFD) at 1550 nm	μm	9.3~10.3	
	Group Index of Refraction（Typical）at 1310 nm	/	1.466	

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	Group Index of Refraction（Typical）at 1550 nm	/	1.467
	Macro-bend loss(1 turn, 7.5mm radius) at 1550nm	dB	≤ 0.2
	Macro-bend loss(1 turn, 10mm radius) at 1550nm	dB	≤ 0.1
	Macro-bend loss(10turns, 15mm radius) at 1550nm	dB	≤ 0.03
Geometrical Characteristics	Cladding diameter	μm	125 ± 0.7
	Cladding non-circularity	%	≤ 0.7
	Coating diameter	μm	245 ± 5
	Coating/cladding concentricity error	μm	≤ 12.0
	Coating non-circularity	%	≤ 6.0
	Core/cladding concentricity error	μm	≤ 0.5

OM1（62.5/125）

Category	Items	Unit	Description	
			Before cabled	After cabled
Optical Characteristics	Attenuation at 850 nm	dB/km	≤ 2.7	≤3.5
	Attenuation at 1300 nm	dB/km	≤ 0.6	≤ 1.5
	Zero dispersion wavelength	nm	1320～1365	
	Zero dispersion slope at 1295nm~1310nm	/	≤ 0.11	
	Zero dispersion slope at 1300nm~1320nm	/	≤ 0.001 (1438·λo)	
	Group Index of Refraction（Typical）at 850 nm	/	1.496	
	Group Index of Refraction（Typical）at 1300 nm	/	1.491	
	Numerical Aperture	/	0.275 ± 0.015 NA	
	Bandwidth at 850 nm	MHz·km	≥ 200	
	Bandwidth at 1300 nm	MHz·km	≥ 500	
	Macro-bend loss(100turns, 37.5mm radius) at 1300nm	dB	≤ 0.5	
Geometrical Characteristics	Core diameter	μm	62.5 ± 2.5	
	Cladding diameter	μm	125.0 ± 1.0	
	Core non-circularity	%	≤ 5.0	
	Cladding non-circularity	%	≤ 1.0	
	Coating diameter	μm	245 ± 7	
	Coating/cladding concentricity error	μm	≤ 10.0	
	Coating non-circularity	%	≤ 6.0	
	Core/cladding concentricity error	μm	≤ 1.5	

OM2（50/125）

Category	Items	Unit	Description	
			Before cabled	After cabled
Optical Characteristics	Attenuation at 850 nm	dB/km	≤ 2.3	≤3.5
	Attenuation at 1300 nm	dB/km	≤ 0.6	≤ 1.5
	Zero dispersion wavelength	nm	1295～1340	
	Zero dispersion slope at1295nm~1310nm	/	≤ 0.105	
	Zero dispersion slope at 1300nm~1320nm	/	≤ 0.000375 (1590·λo)	
	Group Index of Refraction（Typical）at 850 nm	/	1.482	
	Group Index of Refraction（Typical）at 1300 nm	/	1.477	
	Numerical Aperture	/	0.200 ± 0.015 NA	
	Bandwidth at 850 nm	MHz·km	≥ 500	
	Bandwidth at 1300 nm	MHz·km	≥ 500	
	Macro-bend loss(100turns, 37.5mm radius) at	dB	≤ 0.5	

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	1300nm		
	Macro-bend loss(2turns,7.5mm radius) at 1300nm	dB	≤ 1.0
Geometrical Characteristics	Core diameter	μm	50 ± 2.5
	Cladding diameter	μm	125.0 ± 1.0
	Core non-circularity	%	≤ 5.0
	Cladding non-circularity	%	≤ 1.0
	Coating diameter	μm	245 ± 7
	Coating/cladding concentricity error	μm	≤ 10.0
	Coating non-circularity	%	≤ 6.0
	Core/cladding concentricity error	μm	≤ 1.5

OM3

Category	Items	Unit	Description	
			Before cabled	After cabled
Optical Characteristics	Attenuation at 850 nm	dB/km	≤ 2.3	≤3.5
	Attenuation at 1300 nm	dB/km	≤ 0.6	≤ 1.5
	Zero dispersion wavelength	nm	1295～1340	
	Zero dispersion slope at 1295nm~1310nm	/	≤ 0.105	
	Zero dispersion slope at 1300nm~1320nm	/	≤ 0.000375 (1590·λo)	
	Group Index of Refraction（Typical）at 850 nm	/	1.482	
	Group Index of Refraction（Typical）at 1300 nm	/	1.477	
	Numerical Aperture	/	0.200 ± 0.015 NA	
	Overfilled Bandwidth at 850 nm	MHz·km	≥ 1500	
	Overfilled Bandwidth at 1300 nm	MHz·km	≥ 500	
	Effective Modal Bandwidth at 850 nm	MHz·km	≥ 2000	
	Macro-bend loss(100turns, 30mm radius) at 850nm	dB	≤ 0.5	
	Macro-bend loss(100turns, 30mm radius) at 1300nm	dB	≤ 0.5	
Geometrical Characteristics	Core diameter	μm	50 ± 2.5	
	Cladding diameter	μm	125.0 ± 1.0	
	Core non-circularity	%	≤ 5.0	
	Cladding non-circularity	%	≤ 1.0	
	Coating diameter	μm	245 ± 7	
	Coating/cladding concentricity error	μm	≤ 10.0	
	Coating non-circularity	%	≤ 6.0	
	Core/cladding concentricity error	μm	≤ 1.0	

BI OM4

Category	Items	Unit	Description	
			Before cabled	After cabled
Optical Characteristics	Attenuation at 850 nm	dB/km	≤ 2.3	≤3.5
	Attenuation at 1300 nm	dB/km	≤ 0.6	≤ 1.5
	Zero dispersion wavelength	nm	1295～1340	
	Zero dispersion slope at 1295nm~1310nm	/	≤ 0.105	
	Zero dispersion slope at 1300nm~1320nm	/	≤ 0.000375 (1590·λo)	
	Group Index of Refraction（Typical）at 850 nm	/	1.482	
	Group Index of Refraction（Typical）at 1300 nm	/	1.477	
	Numerical Aperture	/	0.200 ± 0.015 NA	
	Overfilled Bandwidth at 850 nm	MHz·km	≥ 3500	
	Overfilled Bandwidth at 1300 nm	MHz·km	≥ 500	
	Effective Modal Bandwidth at 850 nm	MHz·km	≥ 4700	

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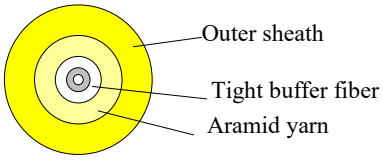
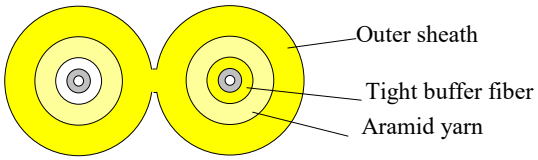
	Macro-bend loss(100turns, 30mm radius) at 850nm	dB	≤ 0.5
	Macro-bend loss(100turns, 30mm radius) at 1300nm	dB	≤ 0.5
Geometrical Characteristics	Core diameter	μm	50 ± 2.5
	Cladding diameter	μm	125.0 ± 1.0
	Core non-circularity	%	≤ 5.0
	Cladding non-circularity	%	≤ 1.0
	Coating diameter	μm	245 ± 7
	Coating/cladding concentricity error	μm	≤ 10.0
	Coating non-circularity	%	≤ 6.0
	Core/cladding concentricity error	μm	≤ 1.0

Cable Performance

Cable structure





Simplex cable GJFJV-1B6a2(2.0mm)

Items		Descriptions
Tight buffer fiber	Buffer material	PVC/LSZH
	Color	White
	Diameter	0.85±0.05mm
Strength member		Aramid yarn
Outer Sheath	Material	PVC/LSZH
	Color code	Yellow
Cable Diameter		1.9±0.2mm

Zipcord cable GJFJV-2B6a2

Items		Descriptions
Tight buffer fiber	Buffer material	LSZH
	Color	White/Yellow
	Diameter	0.85±0.05mm
Strength member		Aramid yarn
Outer Sheath	Material	LSZH
	Color code	Yellow
Cable Diameter		(4.0±0.3)*(1.9±0.3) mm

Ordering Information

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1 2 3 4 5 6

1 Connector 1,eg: LC/U,DLC/U,LC/A,DLC/A,SC/U,SC/A,FC/U,FC/A,ST

2

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Connector 2, eg: LC/U ,DLC/U, LC/A,DLC/A,SC/U,SC/A, FC/U,FC/A,ST ,0（pigtail）

3 Cable sheath, eg: LSZH,PVC,OFNR,OFNP

4 Fiber type, eg:G657A2 ,BI OM3， BI OM4

5 Cable Type, eg:09,20,30,22,33,1209

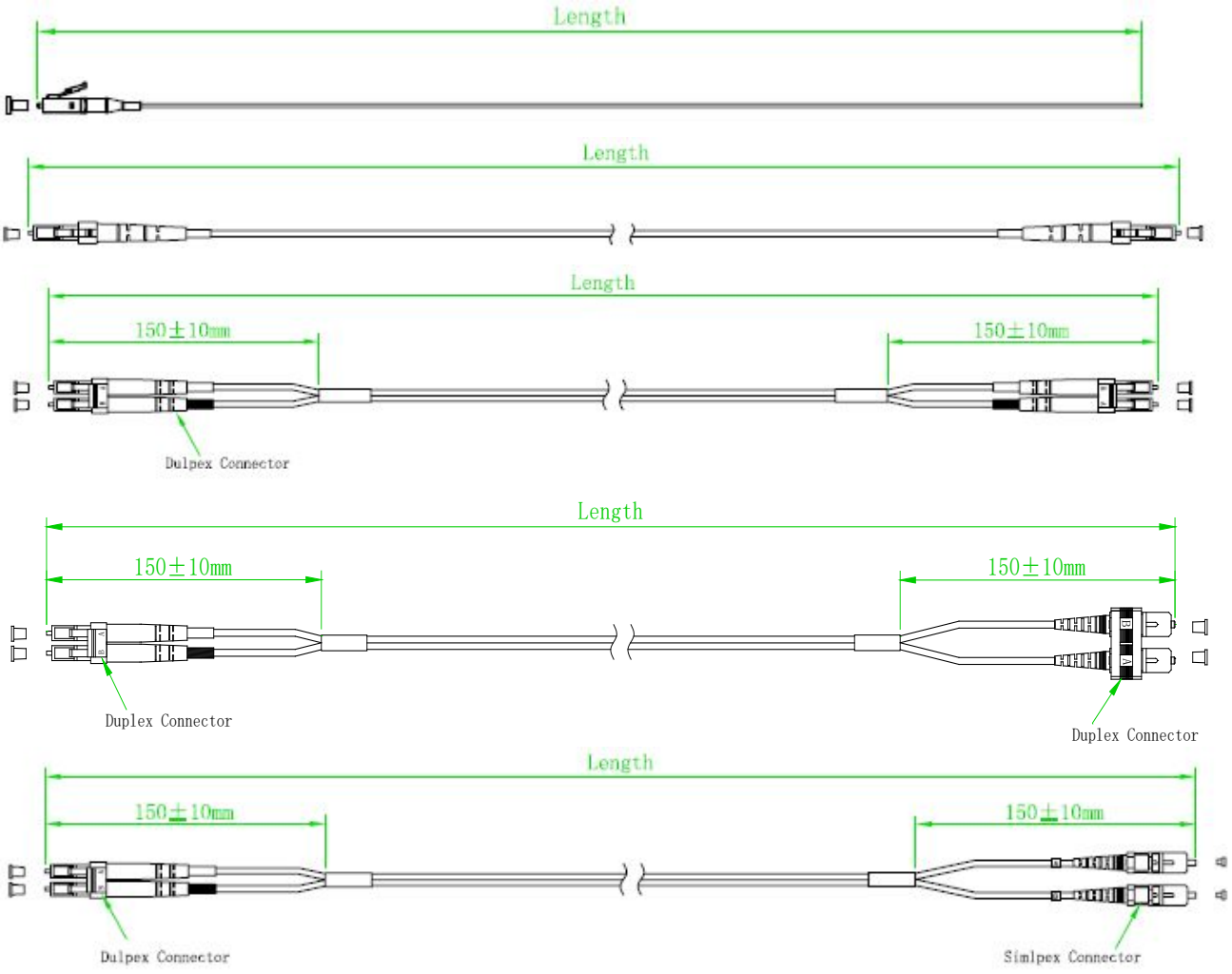
6 Cable Length, eg:10,20

Example:

Product Type：iCONEC-LC/U-LC/U-LSZH-BI OM4-20-2m
Product description：iCONEC 1F BI muti-mode patch cord Φ2.0,LSZH,OM4,LC/UPC-LC/UPC,2m

Technical Drawing

Length shall be specified from connector to connector.



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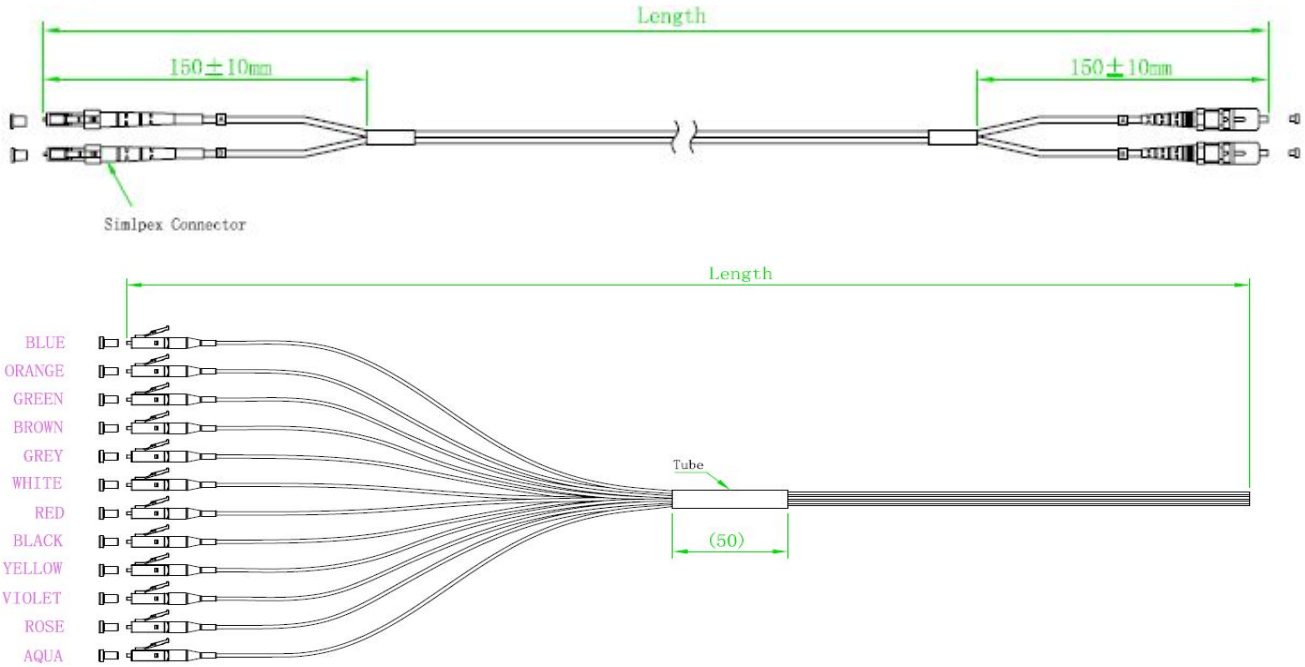
Patch Cord &Pigtails



Draft	Date	Approved	Date
Yinjuan	6/29/2018	Huangwei	6/29/2018

Rev.	Engineering change number	Name	Date
200		Yinjuan	6/29/2018

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